

FOREHEAD SENSOR PLACEMENT

ABSTRACT OF THE DISCLOSURE

Forehead oximetry sensor devices and methods for determining physiological parameters using forehead oximetry sensors. One method includes placing an oximetry sensor on the forehead of a patient, such that the sensor is placed on the lower forehead region, above the eyebrow with the sensor optics placed lateral of the iris and proximal the temple; and operating the pulse oximeter to obtain the physiological parameter. In one aspect, the method also includes providing and placing a headband over the oximetry sensor, or alternately, the sensor is a headband-integrated sensor. The headband has an elastic segment sized to fit around the patient's head. The headband also includes a non-elastic segment that is smaller than and attached with the elastic segment. The non-elastic segment is sized to span a portion of the elastic segment when the elastic segment is stretched. In addition, the non-elastic segment is larger than the portion of the elastic segment it spans when the elastic segment is not stretched. When the headband or the headband-integrated sensor is sufficiently tight, it delivers a pressure in the range higher than the venous pressure and lower than the capillary pressure to the forehead of the patient.

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